wherein the mixture has a dispersity coefficient (DC) greater than 10,000 where

$$DC = \frac{\left(\sum_{i=1}^{n} N_i M_i\right)^2}{\sum_{i=1}^{n} N_i M_i^2 \sum_{i=1}^{n} N_i - \left(\sum_{i=1}^{n} N_i M_i\right)^2}$$

wherein:

n is the number of different molecules in the sample;

N_i is the number of i^{th} molecules in the sample; and

M_i is the mass of the i^{th} molecule.

7. (Amended) The mixture according to Claim 1, wherein the **[insulin drug is human insulin and the]**oligomer is covalently coupled to Lys^{B29} of the human insulin **[and has the formula:**

$$-\overset{\overset{\displaystyle O}{\|}}{C}-(CH_2)_5-(OC_2H_4)_7-OCH_3]\ .$$

10. (Amended) The mixture according to Claim 1, wherein the **[mixture]** human insulin-drug oligomer has an increased resistance to degradation by chymotrypsin when compared to the resistance to degradation by chymotrypsin of a polydispersed mixture of insulin drug-oligomer conjugates having the same number average molecular weight as the mixture.

16. (Amended) A mixture of conjugates each comprising insulin coupled to an oligomer that comprises a polyethylene glycol moiety, wherein the mixture has a dispersity coefficient (DC) greater than 10,000 where

$$DC = \frac{\left(\sum_{i=1}^{n} N_i M_i\right)^2}{\sum_{i=1}^{n} N_i M_i^2 \sum_{i=1}^{n} N_i - \left(\sum_{i=1}^{n} N_i M_i\right)^2}$$

wherein:

n is the number of different molecules in the sample;

N_i is the number of i^{th} molecules in the sample; and

M_i is the mass of the i^{th} molecule; and

wherein the conjugate comprises a first oligomer and a second oligomer; and

[The mixture according to Claim 15]

wherein the first oligomer is covalently coupled at Lys^{B29} of the insulin and the second oligomer is covalently coupled at N-terminal A1 or N-terminal B1 of the insulin.

18. (Amended) The mixture according to Claim **[1]** 16, wherein the insulin **[drug]** is covalently coupled to at least one of the **[oligomer]** oligomers by a hydrolyzable bond.

19. (Amended) The mixture according to Claim **[1]** 16, wherein the insulin is covalently coupled to the polyethylene glycol moiety of at least one of the **[oligomer]** oligomers.

20. (Amended) The mixture according to Claim **[19]** 16, wherein at least one of the **[oligomer]** oligomers **[further]** comprises a lipophilic moiety covalently coupled to **the** polyethylene glycol moiety.

21. (Amended) The mixture according to Claim **[1]** 16, wherein at least one of the **[oligomer]** oligomers **[further]** comprises a lipophilic moiety.

25. (Amended) The mixture according to Claim **[24]** 16, wherein the first and the second oligomers are the same.

26. (Amended) The mixture according to Claim **[1]** 16, wherein the oligomer comprises a first polyethylene glycol moiety covalently coupled to the insulin by a non-hydrolyzable bond and a second polyethylene glycol moiety covalently coupled to the first polyethylene glycol moiety by a hydrolyzable bond.

28. (Amended) The mixture according to Claim [1] 16, wherein the conjugates are each amphiphilically balanced such that each conjugate is aqueously soluble and able to penetrate biological membranes.

30. (Amended) A method of treating insulin deficiency in a subject in need of such treatment, said method comprising:

administering an effective amount of the composition of claim 29 **[a mixture of conjugates each comprising an insulin drug coupled to an oligomer comprising a polyethylene glycol moiety, wherein the mixture has a dispersity coefficient (DC) greater than 10,000 where**

$$DC = \frac{\left(\sum_{i=1}^{n} N_i M_i\right)^2}{\sum_{i=1}^{n} N_i M_i^2 \sum_{i=1}^{n} N_i - \left(\sum_{i=1}^{n} N_i M_i\right)^2}$$

wherein:

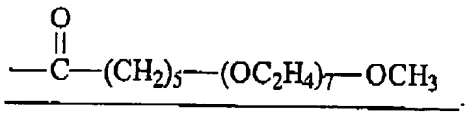
n is the number of different molecules in the sample;

N_i is the number of i^{th} molecules in the sample; and

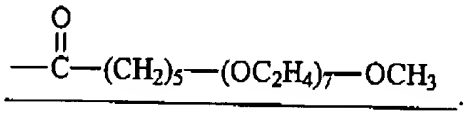
M_i is the mass of the i^{th} molecule;]

to the subject to treat the insulin deficiency.

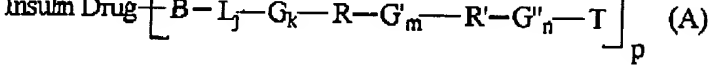
46. (Amended) A mixture of conjugates each comprising an insulin drug coupled to an oligomer that comprises a polyethylene glycol moiety, said mixture having a molecular weight distribution with a standard deviation of less than about 22 Daltons, wherein the insulin drug is human insulin and each oligomer is covalently coupled to Lys^{B29} of the human insulin and has the formula:



50. (Amended) A mixture of conjugates each comprising an insulin drug coupled to an oligomer that comprises a polyethylene glycol moiety, said mixture having a molecular weight distribution with a standard deviation of less than about 22 Daltons, in which each conjugate[:] comprises an insulin drug coupled to an oligomer[;] and has the same number of polyethylene glycol subunits, wherein the insulin drug is human insulin and each oligomer is covalently coupled to Lys^{B29} of the human insulin and has the formula:



52. (Amended) A mixture of conjugates in which each conjugate is the same and has the formula:



(A)

wherein:

B is carbonyl;

L is a linker moiety;

G, G' and G" are individually selected spacer moieties;

R is C_5 alkylene and R' is polyethylene glycol having 7 polyethylene glycol subunits **[R is a lipophilic moiety and R' is a polyalkylene glycol moiety, or R' is the lipophilic moiety and R is the polyalkylene glycol moiety]**;

T is methoxy;

J[, k, m and n are individually] is 0 or 1;

k, m and n are 0; and

p is an integer from 1 to the number of nucleophilic residues on the insulin drug.

Please add the following new claims:

68. (New) The mixture according to claim 16, wherein at least one of the oligomers comprises a polyethylene glycol moiety having at least 2 polyethylene glycol subunits.